

Notice of Allowability	Application No.	Applicant(s)	
	10/067,417	SHIRASAWA, HISAO	
	Examiner	Art Unit	
	Charlotte M. Baker	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Restriction Response (Election) 01/12/2006.
2. ☒ The allowed claim(s) is/are 29-44.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>02/07/02; 01/12/06</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Surinder Sachar (34,423) on 02/03/2006.

2. The application has been amended as follows:

The following claims are cancelled: 1-28

Allowable Subject Matter

3. Claims 29-44 are allowed.
4. The following is an examiner's statement of reasons for allowance: claims 29, 31, 33, 35, 37, 39 and 41 are allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches a color converting device as claimed in the following:

storing means for storing n-dimensional interpolation coefficients corresponding to each of said solids;

determining means for dividing said input color signal into higher-order data and lower-order data, and determining which one of said solids of one of said polyhedral units said input color signal belongs to according to a magnitude relation among said lower-order data, the one of said polyhedral units being selected according to said higher-order data;

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reading means for reading the n-dimensional interpolation coefficients corresponding to the determined one of said solids from said storing means;

generating means for generating (n-1)-dimensional interpolation coefficients used for an (n-1)-dimensional interpolative calculation from said n-dimensional interpolation coefficients;

and interpolating means for performing said (n-1)-dimensional interpolative calculation by using said lower-order data and said (n-1)-dimensional interpolation coefficients.

5. Yamaguchi (6,587,223) discloses a color signal converter for color image printing.

Yamaguchi fails to specifically address the invention as claimed.

6. Vondran, Jr. (5,966,474) discloses transformation of data from a first color space to a second color space using interpolation techniques. Vondran, Jr. fails to specifically address the invention as claimed.

7. Vondran, Jr. (5,717,507) discloses an apparatus for generating interpolator input data for a color space conversion from RGB to CMYK. Vondran, Jr. fails to specifically address the invention as claimed.

8. Claims 30, 32, 34, 36, 38,, 40 and 42 are allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches a color converting device as claimed in the following:

storing means for storing n-dimensional interpolation coefficients corresponding to each of said solids;

determining means for dividing each of said n color signals into higher-order data and lower-order data, and determining which one said solids of one of said polyhedral

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units said input color signal belongs to according to a magnitude relation among said lower-order data of said n color signals excluding at least one color signal therefrom, the one of said polyhedral units being selected according said higher-order data;

reading means for reading the n -dimensional interpolation coefficients corresponding to the determined one of said solids from said storing means;

generating means for generating $(n-1)$ -dimensional interpolation coefficients used for an $(n-1)$ -dimensional interpolative calculation from said n -dimensional interpolation coefficients; and

interpolating means for performing said $(n-1)$ -dimensional interpolative calculation by using said lower-order data and said $(n-1)$ -dimensional interpolation coefficients.

9. Yamaguchi (6,587,223) discloses a color signal converter for color image printing.

Yamaguchi fails to specifically address the invention as claimed.

10. Vondran, Jr. (5,966,474) discloses transformation of data from a first color space to a second color space using interpolation techniques. Vondran, Jr. fails to specifically address the invention as claimed.

11. Vondran, Jr. (5,717,507) discloses an apparatus for generating interpolator input data for a color space conversion from RGB to CMYK. Vondran, Jr. fails to specifically address the invention as claimed.

12. Claims 43 and 44 are allowed over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of said prior art which teaches a color converting method or program as claimed in the following:

determining step of dividing said input color signal into higher-order data and lower-order data, dividing one of said 16-vertex units selected according to said higher-order data into six 8-vertex solids, and determining which one of said six 8-vertex solids said input color signal belongs to according to a magnitude relation among said lower-order data;

the generating step of generating three-dimensional interpolation coefficients used for a three-dimensional interpolative calculation from four-dimensional interpolation coefficients corresponding to the determined one of said 8-vertex solids; and

the interpolating step of performing said three-dimensional interpolative calculation by using said lower-order data and said three-dimensional interpolation coefficients so as to generate said output color signal.

13. Yamaguchi (6,587,223) discloses a color signal converter for color image printing.

Yamaguchi fails to specifically address the invention as claimed.

14. Vondran, Jr. (5,966,474) discloses transformation of data from a first color space to a second color space using interpolation techniques. Vondran, Jr. fails to specifically address the invention as claimed.

15. Vondran, Jr. (5,717,507) discloses an apparatus for generating interpolator input data for a color space conversion from RGB to CMYK. Vondran, Jr. fails to specifically address the invention as claimed.

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Conclusion

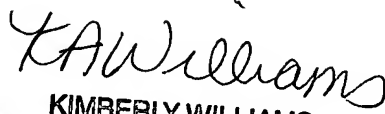
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlotte M. Baker whose telephone number is 571-272-7459. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CMB



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